CHAPTER 2

Existing and Future Conditions

How is the Countywide Transportation System working now, and what quality of transportation service can be provided in the future given the money available to us? A critical part of any long-term transportation plan is to answer the question of whether planned improvements will be enough to maintain the quality of transportation service in the face of continued population and employment growth. Without additional funding and continued management, congestion will degrade the performance of the countywide transportation system, and it will be unable to meet the standards of a modern system.

ROADWAY AND TRANSIT SERVICE MEASURES

Standards provide a tool for measuring performance of the road and transit systems. Roadway congestion standards are established by "levels of service" (LOS), which indicate the amount of time lost due to traffic congestion. There are six gradations of LOS, ranging from A to F. An LOS designation of A represents free flow, or vehicles that travel unimpeded at the posted speed limit. An LOS designation of F represents very congested, bumper-to-bumper conditions. Congested locations are defined as those operating at LOS E or F.

Transit service standards established in the *Congestion Management Program* (CMP) include frequency of service, routing, load factors and coordination of service with other transit operators.

EXISTING CONDITIONS

The County's Transportation System

Alameda County extends from the region's urban core to its rural periphery, incorporating land uses that range from intensely urban to suburban and rural. The diversity in geography and in patterns of development leads to a variety

Transportation is the top regional issues for Alameda County and Bay Area residents.

of transportation needs within each community. Alameda County residents have a variety of modes and routes from which to choose.

Today, factors such as the cost of housing, quality of schools and community identity have more influence on where people live than does the transportation system. However, transportation is perennially ranked as a top regional issue, according to surveys conducted by the Bay Area Council. In 2000, the last year for which data is available, transportation was ranked number one both by Alameda County and Bay Area residents.

Portions of Alameda County's roadway and transit network have been included in the Metropolitan Transportation Commission's (MTC) Metropolitan Transportation System (MTS). Those streets and roads, highways, mass transit routes, bikeways, transfer points, airports, and seaports are considered essential for regional mobility. An expanded description of the MTS is presented in Appendix A.

The Roadway Network

Alameda County has an extensive network of interstate freeways, state highways and principal arterials that serve as primary trunklines and key connectors to adjacent counties. Several major transportation improvements were implemented on Alameda County's roadway network since the last update of the plan. These include:

- I-80 HOV lane,
- I-238 southbound auxiliary lanes,
- the Cypress portion of I-880,
- part of the I-580/I-680 interchange ramps, and
- I-680 auxiliary lane at Mission Boulevard.

Also, funding is available for widening on I-238 to construct additional through lanes, I-680 to construct a southbound HOV lane and install ramp metering, and widening of the I-880/ SR 262 interchange.

Transit Service

Alameda County is well-served by a variety of transit modes, including intercity rail, BART rail, express bus, local bus, and ferry. An expanded description of each major transit operation is presented in Appendix A.

TRAVEL PATTERNS

The information presented in this chapter about travel behavior—how people get to work, how long it takes them and so on—is based on data from the 1990 census. Future updates of the Countywide Transportation Plan *will provide information on travel behavior based on the 2000 census as data become available. It should be noted that significant demographic changes have occurred since 1990 that have had a major impact on travel behavior. The 1960-1990 census information is included to show demographic changes over time.*

A number of factors have affected travel behavior in Alameda County and the Bay Area in the last decade. Among the most significant are:

- the real increase (relative to inflation) in average household income,
- the rapid growth in vehicle ownership,
- higher labor-force participation rates among women,
- increased average household size,
- the relatively fast growth in suburb-to-suburb commutes and relatively slow growth in the central city commute,
- a decline in auto operating costs, and
- a decline in federal transit operating subsidies available to Bay Area transit operators.

These are the primary reasons we have seen more people rely on the single-occupant automobile. These trends continue in the current decade and are expected to continue in future decades.

The Historical Commute

The percentage of residents who both live and work in Alameda County has dropped steadily since 1960, as it has in most Bay Area counties. In 1960, more than 87 percent of Alameda County residents worked in Alameda County. In 1990, only 71 percent of residents worked locally in Alameda County, increasing the number of long-distance commuters. One advantage of the present transportation system is that it allows people to make independent decisions about where to live and work.

The percent of Alameda County residents who work within the county is projected to remain steady. In 2005, 72 percent of the residents are expected to work in the county, 10 percent in Santa Clara County; seven percent in San

Francisco County; five percent in Contra Costa County and four percent in San Mateo County.

However, since more than a majority of the residents still work within the county, the key transportation problem is how to move Alameda County residents around the county. The next most significant commute is work travel to Santa Clara County. San Francisco is no longer the key work location for Alameda County residents.

Choice of Commute Mode

Based on 1990 census data, the most recent data available, 67 percent of all Alameda County workers commuting to jobs drove alone. This is less than in all other Bay Area counties except San Francisco and Marin; however, the share of all Alameda County workers driving alone to jobs increased from 62 percent in 1980 to 67 percent in 1990. The number of Alameda County residents who drove alone to all counties to work (including trips within the county) increased 35 percent between 1980 and 1990, compared with only a 25 percent increase in the number of employed residents in Alameda County.

For workers commuting from the eight Bay Area counties close to Alameda County, 74 percent (117,900 commuters) drove alone. People commuting from Santa Clara and Napa counties had the highest rate of driving alone.

Although not comparable to the census data, RIDES for Bay Area Commuters, Inc., has conducted surveys of Alameda County residents annually since 1993. The RIDES survey showed drive-alone rates in Alameda County of 62 percent in 1993, 66 percent in 1994, 65 percent in 1996, and 62 percent in both 1999 and 2000.

A high level of transit usage would be expected, given the extent of transit service provided in Alameda County. In 1980, 12.5 percent of the Alameda County workforce (63,300 commuters) used public transportation to get to work. The 1990 census showed that while the relative number of commuters on public transportation stayed the same (63,100 commuters), the overall share on transit decreased to 10 percent. This compares to 11.4 percent of the Bay Area workers using public transportation to get to work in 1980 and 9.5 percent in 1990.

These results suggest an increasing reliance on the single-occupant automobile both in Alameda County and the Bay Area. However, the RIDES survey shows transit rates in Alameda County at

17 percent in 1993, 13 percent in 1994 and 1996, 18 percent in 1999, and nearly 20 percent in 2000.

Similar trends are observed in ridesharing. While the share of travelers driving alone increased in Alameda County and the Bay Area between 1980 and 1990, the percentage of people who shared rides (carpools) decreased from 16 percent (80,700 commuters) to 12.8 percent (80,800 commuters). As with transit, the relative numbers of carpoolers stayed about the same, but the percent share of overall trips decreased, suggesting an increase in reliance on the single-occupant automobile. The RIDES survey showed 14 percent using carpool, casual carpool, or vanpool as a mode of transportation in 1993, 16 percent in 1994, 15 percent in 1996, 16 percent in 1999 and 14 percent in 2000.

Between 1980 and 1990, a significant shift from three-person to two-person ridesharing occurred in the entire region, including Alameda County. There was a 13 percent reduction in the number of workers commuting in three-person carpools and a six percent increase in the number of two-person carpools. Regionwide, the average vehicle occupancy dropped from 1.132 in 1980 to 1.097 in 1990. The average vehicle occupancy for workers residing in Alameda County matched the regional results. In Alameda County, a three percent decrease in vehicle occupancy occurred between 1980 and 1990, from 1.132 to 1.098. These figures also indicate an increasing reliance on the single-occupant automobile for commute trips.

The 1990 U.S. Census indicated that there were nearly 8,000 bicycle commuters living in Alameda County, nearly all of whom commuted to jobs within the county. Alameda County accounts for 24 percent of all bicycle commuters in the Bay Area, yet only accounts for 21 percent of the region's population. Only Santa Clara County exceeds Alameda County, accounting for 36 percent of the region's bicyclists and 25 percent of the region's population.

Alameda County ranked first in the Bay Area in the number of 1990 work-at-home commuters, with 25,000 persons. This represents four percent of all people who work at jobs in Alameda County. Work-at-home is defined as workers working at home during the 1990 U.S. Census reference week, including telecommuters. Telecommuting and the "information superhighway," a proposed national network of computers and

Twenty-seven percent of the miles on freeways and 12 percet of the miles on major roadways had congested levels of service (LOS E or F).

communications technology, offers potential to reduce future transportation demand.

Despite a significant increase in overall traffic congestion during the 1980s, average commute times remained relatively constant.

PERFORMANCE OF THE SYSTEM

The *2001 Performance Report* (which is currently being prepared) shows that most of the CMP highway system in Alameda County operated at an acceptable level of service in 2000—LOS D or better is considered acceptable. During the evening peak hour in 2000, 27 percent of the miles on freeways and 12 percent of mileage on arterials (major roadways that connect to freeways) in Alameda County operated at LOS E or F. This is an increase over 1993 conditions, when 22 percent of the freeways and eight percent of the arterials operated at LOS E or F.

The average length of time it took all employed workers residing in Alameda County to get to work increased 1.3 minutes from 24.4 minutes in 1980 to 25.7 minutes in 1990 according to the most recent census data available. Among Alameda County workers who drove alone, commute times increased from 21.4 to 23.6 minutes. Average rideshare commute times increased from 27.8 to 28.2 minutes. Despite a significant increase in overall traffic congestion during the 1980s, average commute times remained relatively constant, increasing only 5.3 percent.

The average distance traveled by commuters in Alameda County is slightly higher than it was in 1980, increasing from 10.3 miles to 10.9 miles, an increase of six percent. This compares to an eight percent increase in the Bay Area region, which increased from 10.2 miles in 1980 to 11 miles in 1990.

Although not directly comparable, the *RIDES Commute Profile 2000* shows that average travel time in 2000 in Alameda County was 34.9 minutes and the average commute distance traveled was 17.1 miles.

Roadway Congestion

Compared to other urban areas in the United States, the San Francisco-Oakland area has the second highest roadway congestion levels behind Los Angeles. Chicago, Illinois, and Washington, D.C., are tied for third, followed by the Seattle-Everett area, which is fourth. The San Jose area ranked 15th. The rankings were prepared by the Texas Transportation Institute (TTI) in the *2001 Urban Mobility Report* and represent 1999 conditions in 68 urban areas nationwide.

The 2000 Level of Service Monitoring Study showed that in Alameda County p.m. peak congested freeways include I-80, I-880, State Route 24, SR 13 near SR 24, SR 92 between I-880 and the San Mateo Bridge, I-238 between I-880 and I-580, I-580 between I-680 and Santa Rita Road, I-580 between Center Street and I-238, and I-680 from SR 84 to SR 238/Mission (during the a.m. peak).

Caltrans surveys the freeway system annually to determine the severity of congestion; the results for 2000 are shown in Figure 2.1. Some of the key findings were:

- I-80 westbound from SR 4 in Contra Costa County to the Alameda County/San Francisco County line in the morning is the number one congested spot in Alameda County and the Bay Region.
- I-680 southbound in the morning from Sunol through Fremont remains the number two congested spot and I-880 southbound in the morning from SR 84 to Dixon Landing Road as number three in Alameda County and the Bay Area.
- Of the top 10 congested locations in the Bay Area in 2000, four are in Alameda County; the three mentioned above and I-880 northbound in the morning from south of West Grand Avenue to the Bay Bridge Toll Plaza (number 5 in Alameda County).
- Of the top 10 congested locations in Alameda County only, seven are in the south and east county areas. These changes from previous years reflect the dramatic increase in jobs in southern Alameda County and Santa Clara County coupled with a shortage of new housing.

Arterial segments that are typically congested include Ashby Avenue (Route 13) near Claremont Boulevard and the Caldecott Tunnel area; portions of San Pablo Avenue, Shattuck Avenue, and Adeline in Berkeley; Hesperian Boulevard in San Leandro and the unincorporated area of the county; Decoto Road near Union Square in Union City and Mowry Avenue through Fremont.

Roadway Maintenance Needs

Degradation of the quality of roadway surfaces is an issue for people who drive, take transit, bicycle or walk. The more we delay maintenance repairs on our roads, the higher our costs for wear and tear on our cars and buses.

Figure 2.1 — 2000 Top 10 Congested Locations in Alameda County

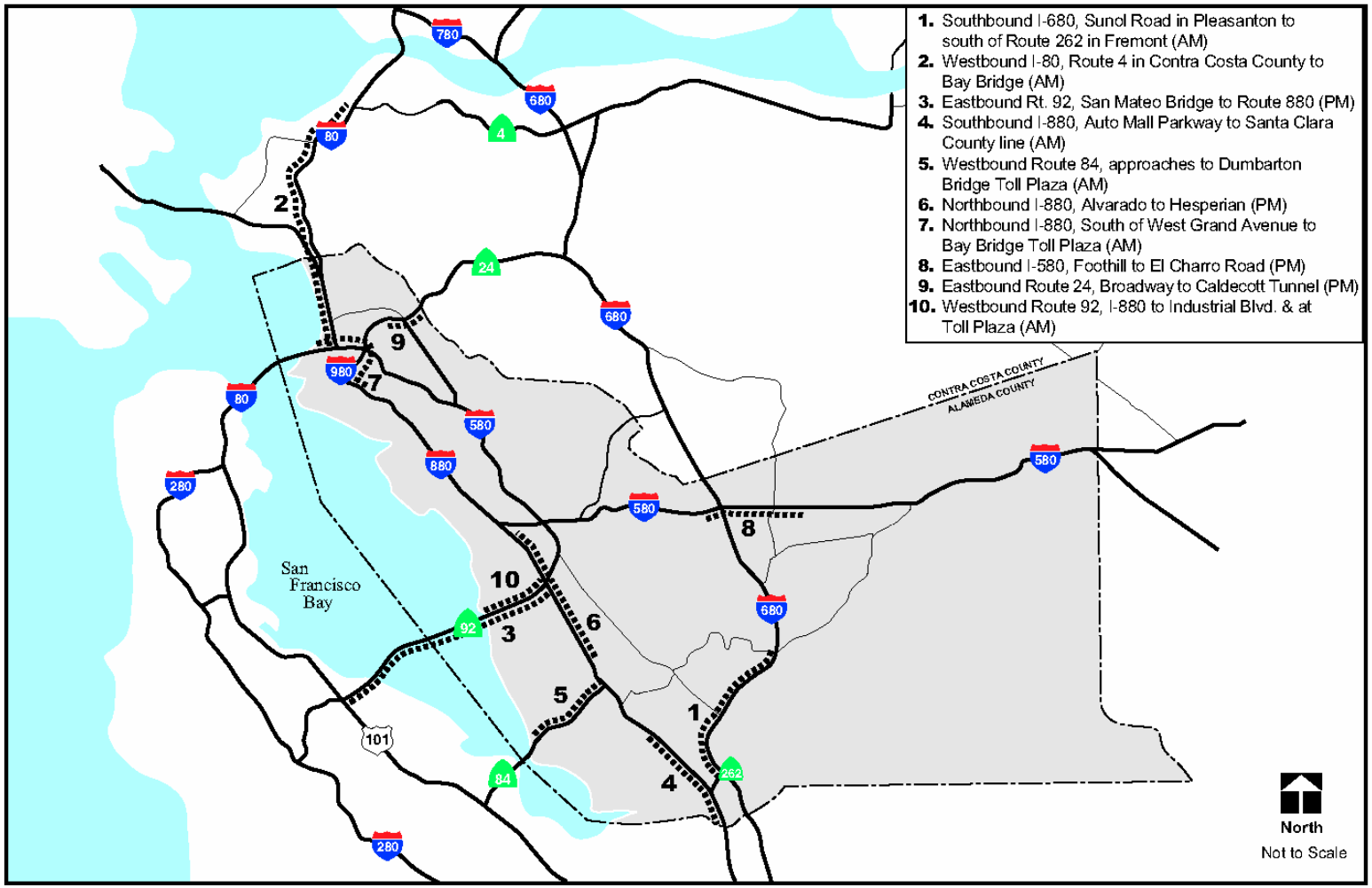

Figure 2.1
1998 Top 10 Congested Locations in Alameda County

Source: "State of Transportation in Alameda County" 1998 Performance Report, ACCMA, February 25, 1999 and 1998 Highway Congestion Monitoring Report, Caltrans, District 4.

The current roadway maintenance needs on MTS and non-MTS local streets and roads throughout Alameda County are estimated by MTC to be about $1.9 billion: $170 million on the MTS and $1.7 billion on the non-MTS. MTC estimates the total number of MTS and non-MTS miles to be 3,270. Of these, 305 miles, or nine percent, are on the MTS. The average maintenance backlog (per capita and per mile) is generally higher in the older communities in North County than in the newer communities in South County and East County.

MTC estimates a total 25-year shortfall of $620.5 million for rehabilitating and maintaining all of Alameda County's local streets and roads. This is $24.7 million for roadways on the MTS and $253.2 million for non-MTS routes. If maintenance is deferred, the repair costs will increase exponentially as the roadways deteriorate.

Bridge maintenance needs over the 25-year period are $74.2 million with a $14.4 million shortfall.

Transit Conditions

Existing bus, rail and ferry transit services are provided by BART, AC Transit, LAVTA, Union City Transit, Alameda-Oakland Ferry Service, Alameda Harbor Bay Ferry Service, Altamont Commuter Express and the Capitols commuter rail service. Transit operation performance results are presented in Appendix A.

Major highway corridors have frequent trunkline service. However, those with frequent service (vehicles arriving every 15 minutes or less) are: I-880 between South County and Santa Clara County, I-680 between Fremont and Dublin, I-680 between Dublin and Contra Costa County, I-580 between San Joaquin County and Dublin/Pleasanton, and Route 92 (San Mateo Bridge) and Route 84 (Dumbarton Bridge).

The transbay corridor between Alameda County and San Francisco County has the highest county-to-county percentage of persons traveling by transit anywhere in the Bay Area region. Forty-two and a half percent of all workers in this corridor commute by public transportation. In 1980, 45.5 percent (42,600 commuters) in the Transbay Corridor used public transportation. In 1990, the share decreased to 42.5 percent even though the relative number of transit users increased to 50,300 commuters.

Our transit system is more responsive, efficient and coordinated.

Transit ridership has gradually increased in Alameda County over the last 10 years, resulting in a 12 percent increase in ridership between 1990-91 and 1999-2000. Concurrently, there seems to have been a significant increase in the productivity of arterial transit service, i.e. bus service, from 1990 to 1994, due to the concentration of service on heavily patronized routes. Service concentration seems to have created a system that is simultaneously more responsive, more efficient and more effectively coordinated, a trend that appears to be continuing through 1999-2000.

Safety and Security

Caltrans compiles roadway safety statistics for interstate and state highways. Alameda County Public Works Department does the same for county roads, and individual cities do this for roadway segments within incorporated areas. Caltrans also compiles typical accident rates for all non-city streets by comparing statewide accident statistics for similar types of roadways. The number of accidents-per-million-vehicle-miles-of-travel has dropped on seven of the 10 freeways located in Alameda County between 1998 and 1999, the most recent data available. The accident rate in Alameda County is, in general, higher than the statewide average for similar facility types. Summaries of highway safety trends are presented in Appendix A.

Passenger security and the perception of high-crime activity in the vicinity of transit stations and bus stops represents one barrier to encouraging drivers to use transit. In general, we have seen an overall drop in crime affecting BART and AC Transit passengers in the last decade when data were first reported. Because the level of crime for the smaller operators is relatively low, the data for LAVTA and Union City are not reported here.

Crime statistics compiled by BART police indicate that the number of Part I and Part II crimes against people grew between 1991 and 1993, but then by 1997 had dropped. This is in large part due to increased staff and the implementation of zone policing policies.

In 1994, BART began to operate a decentralized police force that allows officers to spend more time in the community. At any given time, there are typically 30 BART police officers on duty throughout the system, monitoring 39 stations with over 42,000 parking spaces. BART police believe that crime at BART stations reflects general crime levels for the surrounding communities—that BART itself does not bring

criminals into the area. The number of crimes committed in 2000 at Alameda County BART stations is presented in Appendix A.

In 1990, the Alameda and Contra Costa sheriffs' departments entered into cooperative agreements with AC Transit to provide security services for that bus system. By 1992, the number of crimes had dropped significantly from the late 1980s. Since 1993 the number of service calls received and responded to decreased by 22 percent, the number of crimes reported decreased by 56 percent, and number of Part I crimes (i.e., criminal homicide, forcible rape, robbery, aggravated assault, burglary, larceny theft, motor vehicle theft, arson) decreased by 20 percent. The number of Part I crimes on AC Transit have fluctuated up and down since 1993, when the number was 106. The number of crimes peaked in 1994 at 186 and has decreased to 73 in 2000. The number of crimes committed in 2000 on AC Transit is presented in Appendix A.

Mobility for the Disabled

The federal Americans with Disabilities Act (ADA) of 1990 required a wide range of specified accessibility improvements for persons with disabilities. For example, local agencies must ensure that roadway improvement projects are constructed or reconstructed with ramps or curb cuts added to sidewalks at intersections and crosswalks for wheelchairs. Transit agencies are required to provide communications systems for blind and deaf patrons and improved lift and wheelchair securement equipment on new, leased or modified buses. New and key existing rail stations must include a variety of accessibility improvements. Additionally, all transit agencies must provide paratransit services comparable to their fixed route system for persons who are prevented by a disability from using the accessible fixed-route system.

Currently all AC Transit, LAVTA and Union City Transit buses are equipped with lifts or ramps, and all bus lines are 100 percent accessible. New bus and rail car purchases meet all ADA requirements. New bus stop signs have been developed, and key stations and renovated rail cars are being brought up to required standards. AC Transit, BART, LAVTA and Union City Transit all provide complementary paratransit in their service areas for passengers who meet eligibility requirements. AC Transit and BART have partnered to provide their required service as the East Bay Paratransit Consortium in their joint service area in the East Bay. The paratransit services are generally

origin-to-destination and shared-ride, with advance reservations available to those who are certified as eligible.

Freight Movements

In 1990, truck travel accounted for more than eight percent of the total vehicle miles traveled on Alameda County state highways, compared with an average 5.6 percent in other Bay Area counties. Data collected for Caltrans throughout the San Francisco Bay Area show that large trucks (excluding pickups and panel trucks) represent 5.4 percent of all vehicles during the off-peak (11 a.m. to 1 p.m.) compared with 4.2 percent during the a.m. peak period (7 to 9 a.m.) and 2.4 percent during the afternoon peak period (4 to 6 p.m.).

Freight movement in Alameda County is focused largely around two major hubs, the Port of Oakland and Oakland International Airport. Approximately one-tenth of all containers moved through the Port of Oakland arrive or depart via rail, with the remainder moved by trucks. Key rail freight corridors are the Union Pacific line between the Port of Oakland and the city of Richmond (with trains operated by UP and BN-Santa Fe), one Union Pacific line between the Port of Oakland and Santa Clara County, and the Union Pacific line between the Port of Oakland and San Joaquin County via Niles Canyon. The Union Pacific Intermodal Yard is located within the Port. This facility and the JIT are major gateways for transcontinental rail service.

Oakland International Airport is a major hub for freight movements in Alameda County. Key access roadways serving the airport are I-880, Hegenberger Road, 98th Avenue and Doolittle Drive (State Route 61).

Truck movements rely on critical freight routes along I-80, I-880, I-238 and I-580 east of I-238. In general, the peak period for truck travel in Alameda County is midday, with many truckers choosing to avoid the morning and afternoon commute peaks. However, trucks that move loads between the Port of Oakland and the Central Valley must make two round-trips a day to remain profitable, so they do not have the luxury of waiting until midday and must be on the highways during the commute peaks. Truck routes most affected by midday congestion are I-80, I-880, I-580 and I-238.

2001 Performance Report

The summary of 2000 conditions is provided as part of the *"State of Transportation in Alameda County" 2001 Performance Report* prepared by the CMA. The 2001 Performance Report is the fifth report prepared by the CMA and is being prepared concurrently with the *Countywide Transportation Plan.* The purpose of the report is to provide information on how the transportation system is functioning in Alameda County. The report also is used to help identify transportation improvements to be considered in the development of the Capital Improvement Program for the *Congestion Management Program (CMP)* and update of the long-range transportation plan.

Table 2.1 summarizes the performance of the transportation system. In general, the following conditions were observed in 2000:

- Overall, LOS for freeways improved between 1998 and 2000. There were higher percentages of roads with LOS A-C and a drop in segments with LOS E or F. Overall LOS for arterials remained somewhat the same as in previous years.
- Overall average speed for freeways during the evening peak stayed the same. Average speed on arterials was slower than in 1998 by 1 mile per hour. Average speed for freeways in the morning decreased 4.4 miles per hour. Three roadway segments were identified as LOS F, two for the first time in 2000 resulting in a requirement for deficiency plans.
- Although overall speed and level of service remained the same or improved on freeways, level of service on some individual segments dropped, e.g. I-580 in the Tri-Valley area and I-580 at I-238.
- Vehicle hours of delay, i.e. congestion, increased 29.7 percent in 2000 in comparison to 1999. Total delay in 2000 as reported by Caltrans was 68,750 vehicle hours as compared to 53,000 in 1999.
- The I-80 corridor during the morning commute was listed as the most congested in Alameda County and the Bay Area.
- Southbound I-680 during the morning commute ranked as the second most congested freeway in Alameda County and the Bay Area.
- Of the 10 most congested locations in the Bay Area in 2000, four are in Alameda County—the two mentioned above, I-880 southbound in the morning from SR 84 to Dixon Landing Road (number 3 in

Congestion increased 29.7 percent in 2000 with 68,750 vehicle hours of delay.

Alameda County) and I-880 northbound in the morning from south of West Grand Avenue to the Bay Bridge Toll Plaza (number 5 in Alameda County).

- For the first time, SR 92 westbound in the morning from I-880 to the San Mateo Bridge Toll Plaza and I-880 southbound from Washington to SR 92 in the morning made the Top Ten congested corridors, the facilities ranked 9th and 10th in Alameda County.
- The three worst congested freeways during the *afternoon* peak period in 2000 are eastbound SR. 92-San Mateo Bridge to I-880, eastbound I-580 at Hopyard to El Charro, and SR 24 eastbound from Claremont to Caldecott Tunnel (this one is not on the Top 10 list).
- The three worst congested freeways during the *morning* peak period are westbound I-80 from Contra Costa County to the Bay Bridge, southbound I-680 at the Sunol Grade, and southbound I-880 from SR 84 to Dixon Landing Road.
- The percent of roads reported to be in good condition increased eight percent, from 55.2 percent in 1999 to 63.2 percent in 2000.
- Overall, the number of bus routes with 30-minute or less headways stayed the same as last year.
- The Countywide Bicycle Plan was approved by the CMA Board on June 28, 2001. The countywide bicycle network has approximately 500 miles of facilities with 120 existing. The *2001 Performance Report* also tracked the bicycle facilities constructed by the jurisdictions. Eleven miles of bike lanes were added to city networks in the last year.

Table 2.1 — Future Conditions, Summary of Applied Performance Measures

Alameda County Transportation System

PERFORMANCE MEASURE	OBJECTIVE PER CMP	2001 RESULTS	OBSERVATIONS
Highways			
Level of Service (LOS)	Mobility, Air Quality	Freeway and Arterials	There was an improvement in overall level of service for freeways. The percentage of segments with LOS A-C increased while the percentage of segments with LOS E and F decreased. There was little change in LOS for arterials; however, several segments were LOS F for the first time.
Average Speed	Mobility, Air Quality, Land Use	Freeways – 51.02 mph for the afternoon peak Freeways – 38.08 for the morning peak Arterials – 23.64 mph for the afternoon peak	Average evening peak speed on arterials increased 1.01 mph but decreased less than one mile per hour on freeways in 2000. The average freeway speed for the morning peak decreased 4.4 mph in 2000.

PERFORMANCE MEASURE	OBJECTIVE PER CMP	2001 RESULTS	OBSERVATIONS
Travel Time	Mobility, Air Quality, Land Use	Travel times for five origin-destination pairs continued to show auto significantly faster than transit. Bicycle trips in the northern part of the county continue to compete well with both auto and transit trips.	In general, transit trips took more than twice as long as trips by auto. (Note: Some of the increase in trip time may be due to a change in method of collecting data.)
Duration of Congestion (freeways only)	Economic, Air Quality	68,750 vehicle hours of delay in 2000 or 29.7% more in comparison to 1999.	71% of the delay can be attributed to the top five congested freeway segments in the County. I-80 was ranked as the most congested corridor, I-680 ranked second.
Highway Maintenance-Local	Economic	Condition Category: Good – 53.8% Satisfactory – 24.7% Fair – 8.2% Poor – 13.3%	The percentage of roads reported to be in good condition decreased about 2% since 1999 and the roads in poor condition also increased 7.7%. There continues to be a significant maintenance backlog.
Accidents/million vehicle miles of travel	Mobility, Air Quality, Economic	Of the 10 freeways located in Alameda County, three had higher accident rates in 1999 than in 1998.	Accident rates for the busiest freeway (I-80) increased, while the accidents on I-680, the second busiest freeway, decreased slightly.

PERFORMANCE MEASURE	OBJECTIVE PER CMP	2001 RESULTS	OBSERVATIONS
Transit			
Routing	Mobility, Air Quality, Land Use	Surface miles covered by transit increased 14% between 1990 and 2000.	Route miles increased and the amount of service and patronage increased by 60% and 12% respectively.
Frequency	Mobility, Air Quality, Land Use	During peak period, 89% of bus routes have 30-min. headways or less; 29% arrive every 15 minutes. BART headways vary three to 15 minutes during peak.	The percentage of midday and evening headways 30 minutes or less have stayed generally the same although 15 evening routes were eliminated countywide.
Coordination of Transit Services	Mobility, Air Quality	Transfer facilities are located at BART, Amtrak, Dublin and Livermore Transit Centers, Greyhound and ferry terminals.	Greatest number of transfer opportunities is found at the BART stations.
Ridership	Economic, Air Quality, Land Use	1990 Census indicates 10% of Alameda Co. commuters use transit in comparison to 9.6% in Bay region and 5% nationwide. This information will be updated upon release of 2000 data.	The ridership data for all modes does not indicate a trend for the five-year period. Ridership has varied each year.

PERFORMANCE MEASURE	OBJECTIVE PER CMP	2001 RESULTS	OBSERVATIONS
Maintenance	Air Quality	Bus Service: Data indicate that the miles between mechanical road calls for LAVTA and AC Transit have remained about the same since 1999 and have dramatically improved (57% and 164% respectively in the last 10 years). BART: Mean time between service delays has improved consistently since 1991 (72%) and have remained steady since 1999.	Bus: Indicates that fleet is aging and may require replacement in the future BART: Has made special improvements to older cars and added new cars to the system, which has improved service.
Bicycle			
Completion of Countywide Bike Plan	Mobility, Air Quality	The Countywide Bicycle Plan was approved by the CMA Board on June 28, 2001. The Plan proposes approximately 500 miles of bicycle facilities countywide with about 120 miles already existing.	No additional comments